

## ABSTRACT

An electronic lock system for large armored safe movable entry barrier locks that records all access attempts and limits access to persons having two credentials, an access code recorded on an access card as well as a numerical personal identification code (PIN). The access barrier of the system comprises a solenoid-controlled dead bolt whose position changes when a 3V pulse from a microprocessor is passed through a voltage step-up relay that uses 120 V AC input passed through an AC to DC converter to increase the voltage to a 15V pulse capable of causing the solenoid to move the dead bolt barrier. In using the system, the access-seeking individual presents the required access card and inputs a Personal Identification Number (PIN). The access code recorded on the card and the inputted PIN are checked against a ROM-stored authorization codes to determine whether there is or is not a match. No match results in denial of access and termination of the program; a match results in a grant of access along with a display prompt that directs the access seeker to indicate whether the dead bolt solenoid is to be opened or closed.

Approved for Release